



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,905	01/20/2005	Klaus Kock	2002P09019WOUS	7120

7590 10/16/2007  
Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
----------

MIAH, LITON

ART UNIT	PAPER NUMBER
----------	--------------

2617

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/521,905

### Applicant(s)

KOCK, KLAUS

### Examiner

Liton Miah

### Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/20/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because all blocks in figure 1, 2 and 3 should be labeled with descriptive legends. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 23 line 1, "the OFDM" has no antecedent basis. It is same for claims 24 and 25.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13, 14, 20, 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Karna (5,291,299).

**For claim 13**, Karna discloses a communications system for signaling apparatuses at an airport, comprising the following system components: at least one central communications apparatus (**see column 2 line 38**); and a plurality of signaling apparatuses, wherein a communication between the system components is performed via one or more circuits supplying the signal apparatuses with power (**see column 2 lines 1-13**), and wherein the communication between the system components is performed in a frequency range using a number of frequency bands within the frequency range (**see column 2 lines 35-50**).

**For claim 14**, Karna discloses the communication is controlled by a number of time slices (**see column 2 lines 57-65**).

**For claim 20**, Karna discloses up to five time slices are used (**see column 1 lines 37-43**).

**For claim 29**, Karna discloses at least one decentralized communications apparatus is allocated to at least one signaling apparatus, and wherein the decentralized communications apparatus is adapted to measure the reception quality of communications signals (**see column 4 lines 27-38**).

**For claim 30**, Karna discloses at least one decentralized communications apparatus is allocated to at least one signaling apparatus, and wherein the decentralized communications apparatus is adapted to preprocess communication signals (**see column 4 lines 2-12**).

**For claim 31**, Karna discloses decentralized communication apparatuses forming an adaptive system (**see column 4 lines 43-50**).

Art Unit: 2617

**For claim 32**, Karna discloses a communication path between at least two of the system components is determined using the measured reception quality (**see column 4 lines 21-27**).

**Note:** Claim 29 and 30 mention the phrase "adapted to". The phrase "adapted to" is not a positively recited claim limitation. Therefore, the limitations following the phrase are not considered. However, the prior art on the record teaches the limitations following the phrase. It is suggested applicants remove the phrase.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 15, 16, 21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna.

Consider **claims 15 and 16**, and as applied to claims 13 and 14 above, Karna do not specifically disclose that the frequency range is chosen from the range between 10 kHz and 150 kHz.

Nonetheless, the Examiner takes Official Notice that using the frequency range for communication between system components is well known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the system of Karna in order to specifically used the frequency range between 10 kHz and 150 kHz.

**For claim 21**, Karna discloses up to five time slices are used (**see column 1 lines 37-43**).

**Consider claims 23-25**, and as applied to claims 13, 14 and 15, Karna do not specifically disclose that the OFDM method is used for performing the communication.

Nonetheless, the Examiner takes Official Notice that using the OFDM method for communication is well known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the system of Karna in order to specifically used the OFDM method for communication.

8. Claims 17, 18, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna in view of Ward (6,282,417).

**For claim 17-19**, Karna discloses all the subject matter of the claimed invention with the exception of using up to ten frequency bands. Ward from the same or similar fields of endeavor teaches up to ten frequency bands are used (**see column 8 lines 57-67**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have up to ten frequency bands as taught by Ward in the communication network of Karna. Using up to ten frequency bands as taught by Ward can be modified/implemented into the communication network of Karna. The motivation for using up to ten frequency bands as taught by Ward in the communication network of Karna being that it's a radio communication with air controller.

9. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karna in view of Norman et al (2003/0160707).

**For claim 26-28**, Karna discloses all the subject matter of the claimed invention with the exception of using a series circuit and a parallel circuit. Norman et al from the same or similar fields of endeavor teaches the central communications apparatus and the signaling apparatuses are connected via a series circuit (**see paragraph 0023**); the central communications apparatus and the signaling apparatuses are connected via a parallel circuit (**see paragraph 0024**). Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention to have a series circuit and a parallel circuit to connect the central communications apparatus and the signaling apparatus as taught by Norman et al in the communication network of Karna. Using a series circuit and a parallel circuit as taught by Norman et al can be modified/implemented into the communication network of Karna. The motivation for using a series circuit and a parallel circuit as taught by Norman et al in the communication network of Karna being that it controls the field lighting at an airport.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Belger et al (WO 9954854) is cited to show a device, which is considered pertinent to the claimed invention.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liton Miah whose telephone number is (571)270-3124. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm EST.

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571)272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Liton Miah

  
Rafael Perez-Gutierrez  
Supervisory Patent Examiner  
Technology Center 2600  
Art Unit 2617  
10/12/07